

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATIONS**

Bid Opening 05-16-03

The following specifications are supplementary to the 2003 Edition of the *Standard Specifications for Road and Bridge Construction* as they apply to this Contract.

105.06 CHARACTER OF WORKERS ...	Page 38	02-14-03 03-14-03
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Delete the first sentence of Section 105.06 C. in its entirety and insert the following:

When the methods and equipment to be used are specified, other methods and equipment shall not be used without authorization of the Engineer.

106.09 BUY AMERICAN PRODUCTS.	Page 48	02-14-03
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Delete the heading of Section 106.09 and replace with the following:

106.09 BUY AMERICA PRODUCTS.

151.03 HAULING EQUIPMENT.	Page 90	04-11-03
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Delete Section 151.03 A. in its entirety and insert the following:

- A. **Water-Hauling Equipment.** Water hauling units shall be equipped with a spraying device capable of evenly distributing water over the designated area. The water tank and all connections shall be watertight.
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153.06 ROADBED PLANERS.	Page 106 & 107	04-11-03
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Delete the first sentence of the second paragraph in its entirety and insert the following:

The planer shall be equipped with rotary cutting mechanisms capable of trimming the subgrade and base to the required lines and grades within the tolerances of Section 302.04 F.3 Surface Tolerance Type C.

304.04 CONSTRUCTION REQUIREMENTS.	Page 155	02-14-03 03-14-03
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Delete the first sentence in Section 304.04 B.2. and insert the following:

2. **Compaction.** Compaction of the permeable base shall be according to Section 302.04 D. except the roller shall be a 10 ton, double drum, steel wheeled roller.
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306.04 CONSTRUCTION REQUIREMENTS.**Page 160****02-14-03**

Delete the second sentence of Section 306.04 H. in its entirety and insert the following:

The surface shall be finished using a Surface Tolerance Type B as specified in Section 302.04 F.

401.05 METHOD OF MEASUREMENT.**Page 173****05-16-03**

Delete paragraph C. of Section 401.05 in its entirety.

401.06 BASIS OF PAYMENT.**Page 173****05-16-03**

Delete the Pay Item Water in Section 401.06 in its entirety.

408.04 CONSTRUCTION REQUIREMENTS.**Page 192****03-14-03**

Section 408.04 B., the following sentence shall be added at the end of the second paragraph:

The Contractor will provide the bitumen, aggregate and blend portions to the Department for the mix design a minimum of 7 days before production begins.

408.04 CONSTRUCTION REQUIREMENTS.**Page 192****03-14-03**

Delete footnote 3 of the mix design table in Section 408.04 B., in its entirety and insert the following:

The mix design will be approved if the laboratory mix meets one of the three properties, % VMA, Fines/Asphalt Ratio, Film Thickness and all of the other specified properties.

408.07 BASIS OF PAYMENT.**Page 204****04-11-03**

The following item shall be added to this section:

Pay Item	Pay Unit
Rumble Strips	Each or Mile

409.04 CONSTRUCTION REQUIREMENTS.**Page 206****03-14-03**

Delete the words "Special Provision" in line 11 of the first paragraph under Quality Control Plan in Section 409.04 and insert the word "Specification".

409.04 CONSTRUCTION REQUIREMENTS.**Page 207****03-14-03**

Delete the following sentence in lines 5 and 6 of the second paragraph of Section 409.04 A., in its entirety:

The Department will develop the mix design for the project.

Delete the statement "as revised in October 1998" in lines 3 and 4 in the first paragraph of Section 409.04 B., in there entirety.

Delete the table for the Determination of Surface Area in Section 409.04 B.2.c. and insert the following table:

Determination of Surface Area

Sieve Analysis % Passing								
Sieve	Maximum Size	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
Combined Grading	***	***	***	***	***	***	***	***
Coefficient	0.02	0.02	0.04	0.08	0.14	0.30	0.60	1.60

Delete Table 1 of Section 410.02 B. and insert the following:

Table 1
Initial Control Points for Superpave Aggregate Blend Gradation

Sieve Size	Nominal Aggregate Size* ½" (12.5 mm) % Passing	
	min	Max
5/8" (15.9 mm)	100	100
½" (12.5 mm)	90	100
#8 (2.36 mm)	28	58
#200 (75 F)	2.0	7.0

*Nominal aggregate size is defined as one sieve size larger than the first sieve to retain more than 10 percent.

Delete the table for the Determination of Surface Area in Section 410.04 B.1. and insert the following table:

Determination of Surface Area

Sieve Analysis % Passing								
Sieve	Maximum Size	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
Combined Grading	***	***	***	***	***	***	***	***
Coefficient	0.02	0.02	0.04	0.08	0.14	0.30	0.60	1.60

Delete the title of Table 5 in Section 410.04 B.1. and insert the following:

**TABLE 5
MIX DESIGN**

Delete Section 410.04 B.2.c and 410.04 B.2.d in their entirety and insert the following:

- c. 1/2% above the optimum AC content determined by the Trial Mix Design.
- d. 1.0% below the optimum AC content determined by the Trial Mix Design.

Delete Section 410.05 C.1.b. in its entirety and insert the following:

- b. Compact two gyratory specimens with each sample taken to determine the field gyratory density. The number of gyrations applied to the gyratory specimens shall be as specified in the plans or as specified by the Engineer, and the temperature of the mix shall be 270° F plus or minus 5° F; and

Add the following to the first paragraph in Section 550.05 D.:

When separate payment is not made for Doweled Expansion or Contraction Joint Assemblies, the cost to provide and install the assemblies will be incidental to the Concrete Pavement.

570.04 CONSTRUCTION REQUIREMENTS.**Page 277****02-14-03**

Delete the first paragraph in Section 570.04 A.1. and insert the following:

1. Restoring the Subgrade. Concrete in full depth repair areas shall be removed by lifting with adequately sized equipment that will minimize disruption to the existing subgrade. Construction equipment will not be allowed in areas where the concrete has been removed. Voids deeper than one inch beneath the removed concrete shall be filled and compacted with granular fill as directed by the Engineer.

704.03 CONSTRUCTION REQUIREMENTS.**Page 388****03-14-03**

Delete the last sentence of the second paragraph after Section 704.03 A.3 and insert the following:

The Contractor shall provide documentation showing the requirements are being met for any sign supports used that do not comply with NDDOT's Standard Drawings.

754.03 CONSTRUCTION REQUIREMENTS.**Page 454****03-14-03**

Remove all references to Flange Channel in Section 754.03 E.3.

754.03 CONSTRUCTION REQUIREMENTS.**Page 454****05-16-03**

Delete the first two sentences in Section 754.03 E.4. in their entirety and insert the following:

4. **Tubular Sign Supports.** When a sign support is required, a Tubular Sign Support shall be used.
Tubular Sign Supports

754.03 CONSTRUCTION REQUIREMENTS.**Page 454****05-16-03**

Add the following sentence to Section 754.03 E.4:

Welders shall meet the requirements of Section 105.06 D.

754.04 METHOD OF MEASUREMENT.**Page 459****03-14-03**

Remove all references to Flange Channel in Section 754.04 B.

754.04 METHOD OF MEASUREMENT.**Page 460****05-16-03**

Delete the first line of Section 754.04 B.2 in its entirety and insert the following:

2. **Galvanized Steel Posts – Standard Pipe.** Pipe post signs will be

754.04 BASIS OF PAYMENT.**Page 460****03-14-03**

Remove all references to Flange Channel in Section 754.05.

754.05 BASIS OF PAYMENT.**Page 461****05-16-03**

Delete the Pay Item _____ "Galvanized Steel Post – Standard Pipe (Single Post) in Section 754.05 in its entirety and insert the following:

_____ "Galvanized Steel Post – Standard Pipe

762.02 MATERIALS.**Page 462****04-11-03**

Delete Section 762.02 in its entirety and replace with the following:

Pavement Marking material shall meet the following:

Item	Section
Pavement Marking Paint*	880.01
Glass Beads for Pavement Marking Paint	880.02
Plastic Pavement Marking Film*	880.03
Preformed Plastic Marking Film	880.04
Preformed Patterned Pavement Marking Film	880.05
Short-Term Pavement Marking	
Paint	880.06
Tape	880.06
Construction Zone Marking	880.07
Raised Pavement Markers	880.08
Epoxy Paint Pavement Marking	880.09

*Either "slow," "medium," or "fast dry" paint and either type of Plastic Marking Film may be used.

762.05 METHOD OF MEASUREMENT.**Page 475****03-14-03**

In Section 762.05 C.3. and Section 762.05 C.5., delete "Type KNURL" and replace with "Type NR".

Delete the Pay Item Short Term-____-Inch Line, Type KNURL in Section 762.06 and insert the following:

Short Term-____-Inch Line, Type NR

772.03 CONSTRUCTION REQUIREMENTS.

Delete Sections 772.03 T.1, 772.03 T.2, and 772.03 T.3., and insert the following:

1. **Initial Inspection.** An initial functional inspection shall be made approximately 15 days after all signals or flashing beacons under the Contract are operational, except when snow or ice conditions are present preventing observation of installed equipment, or when extreme cold conditions prevent proper observation of equipment operations and adjustments.
 - a. When the above conditions exist, the initial inspection will be delayed. The Engineer will determine when conditions have improved so the inspection can be scheduled.
 - b. During the time of delayed inspection, all signals or flashing beacons in operation shall be maintained by the Contractor. When conditions permit initial inspection to be performed, the other inspections will be performed as specified.
2. **Final Inspection.** A final functional inspection will be made 30 or more days after the initial inspection. The Contractor will request the Engineer to schedule the final inspection. The Engineer shall notify the Traffic Operations Engineer to coordinate a time for the final inspection. The final inspection shall not be made until all items noted on the initial inspection have been corrected. Minor finish work items, such as dirt leveling, will not prevent the final inspection. The traffic signals or flashing beacons shall be in operation during this time. When snow, ice or extreme cold conditions are present preventing the proper observation of the installed equipment, the final inspection will be delayed. The Engineer will determine when the conditions have improved so the inspection can be scheduled. The Contractor shall maintain the signals or flashing beacons during the period between the initial inspection and final functional inspection.
3. **Final Acceptance.** Final acceptance will not be made until the system has been operating for 14 consecutive days after the final inspection without interruption due to malfunctions attributable to defective equipment or improper workmanship. The Contractor shall be responsible for the electrical and communications costs for the system until the traffic signals and/or flashing beacons are accepted by the State.

818.02 SPECIFIC REQUIREMENTS.

Delete Section 818.02 D.2. in its entirety and insert the following:

2. **Polymer Modified Cationic Emulsified Asphalt.** Grade CRS-2P shall meet the requirements AASHTO M 316-98.
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818.02 SPECIFIC REQUIREMENTS.**Page 516****05-16-03**

Delete the Ductility requirements from the property table in Section 818.02 E. in its entirety and replace with the following:

Property	ASTM Test	HFMS-2	HFRS-2P	HFRS-2
Ductility, 77° F., 5cm/min., cm, min.	AASHTO T-51	40		40

822.02 TESTING.**Page 520****03-14-03**

The following requirements shall be added to this section:

C. Treatment Penetration.

Test	Minimum Depth	Method
Penetration	0.15 inch	DOT Procedure

D. Vapor Permeability.

Treated concrete shall retain its moisture vapor permeability as determined by the Department's test procedure.

834.04 PERMANENT METAL CONCRETE FORMS.**Page 532****02-14-03**

Delete the paragraph in Section 834.04 in its entirety and insert the following:

Permanent metal forms for concrete floor slabs shall be of zinc-coated (galvanized) steel sheets meeting ASTM A924 with coating class of G235 according to ASTM A635.

894.05 POSTS AND HARDWARE FOR SIGNS.**Page 575****02-14-03**

In Section 894.05 B.1., second paragraph - "Section 5" should be "Section 6" and "Section 4" should be "Section 5."

894.05 POSTS AND HARDWARE FOR SIGNS.**Page 577****03-14-03**

In Section 894.05 B.4.h.(5) delete "1/6" and insert "1/16".

894.05 POSTS AND HARDWARE FOR SIGNS.**Page 577****03-14-03**

Delete all references to Flange Channel in Section 894.05 B.5. and 894.05 B.5.a.

894.06 DELINEATORS.**Page 579****02-14-03**

Delete the table in Section 894.06 B.2.c. and insert the following:

OBSERVATION ANGLE degrees	ENTRANCE ANGLE degrees	COEFFICIENT OF LUMINOUS INTENSITY cd/lx		
		CRYSTAL	YELLOW	RED
0.1	0	11.0	6.6	2.7
0.1	20	4.4	2.6	1.0

895.03 CONDUCTORS.**Page 44, Vol. 2.****02-14-03**

Delete the last two sentences of Section 895.03 B.2.a.

896.07 TRAFFIC CONTROL STANDARDS.**Page 64, Vol. 2.****03-14-03**

In Section 896.07 B.1, second sentence – delete “AASHTO M-183” and replace with “ASTM A-36”.
